



## Force HS<sup>+</sup> Series

Single Phase Hybrid Inverters

7kW ~ 10.5kW

AUSTRALIAN VERSION 

The Energizer® Force HS<sup>+</sup> Series inverter range offers advanced features and is compatible with high-voltage batteries. With the hybrid inverter range, you're able to expand your solar system by adding extra batteries.

There are 5 inverter size options and it can connect to our Powerstack with up to seven battery modules connected in series, allowing for flexible storage capacity.

### High Performance Single Phase Hybrid Inverters

- Three & Four MPPT design with precise MPPT algorithm
- 97.80% maximum efficiency
- IP65 rated
- Optional export control
- Compact & lightweight
- RS485, Wi-Fi, LAN, GPRS (optional) communications
- Wide voltage range/low start-up voltage
- Android and iPhone apps available
- 10 years warranty



✉ [hello@energizersolar.com](mailto:hello@energizersolar.com)  [energizersolar.com](http://energizersolar.com)



Small  
& Compact



High  
Performance



IP65  
Rated



Remote  
Monitoring

MODEL INPUT	Force 7.0HS <sup>+</sup>	Force 8.0HS <sup>+</sup>	Force 9.0HS <sup>+</sup>	Force 10.0HS <sup>+</sup>	Force 10.5HS <sup>+</sup>
<b>INPUT PV</b>					
Max. Recommended DC Power [W]	10500	12000	13500	15000	15000
Max. DC Voltage [V]			600		
Nominal DC Operating Voltage [V]			360		
Max. Input Current (input A / input B) [A]	16 / 16 / 16 <sup>(1)</sup>			16 / 16 / 16 / 16 <sup>(1)</sup>	
Max. Short Circuit Current (input A / input B) [A]	20 / 20 / 20			20 / 20 / 20 / 20	
Max. Inverter Backfeed Current to the Array [mA]			0		
MPPT Voltage Range [V]			80 ~ 500		
Start-Up Voltage [V]			75		
No. of MPP Trackers	3			4	
Strings per MPP Tracker			1		
DC Disconnection Switch			Optional		
<b>BATTERY CONNECTION</b>					
Battery Type			Li-Ion		
Battery Voltage Range [V]			85 ~ 480		
Recommended Battery Voltage [VDC]			300		
Max. Charge Current [A]			50		
Max. Discharge Current [A]			50		
Communication Interfaces			CAN / RS485		
Reverse Connect Protection			YES		
<b>OUTPUT AC</b>					
Nominal AC Power [VA]	7000	8000	9000	10000	10500
Max. Apparent AC power [VA]	7700	8800	9900	10500	10500
Rated Grid Voltage (AC Voltage Range) [V]			220 / 230 / 240 (180 - 270)		
Rated Grid Frequency [Hz]			50 / 60, ±5		
Nominal AC Current [A]	30.4	34.8	39.1	43.5	45.7
Max. AC Current [A]	33.5	38.3	43.0	45.7	47.7
Displacement Power Factor			0.8 Leading to 0.8 Lagging		
Total Harmonic Distortion (THDI, Rated Power) [%]			<3		
<b>INPUT AC</b>					
Max AC Power [VA]	14000	16000	18000	18000	18000
Max. AC Current [A]	60.9	69.5	78.3	78.3	78.3
Rated Grid Voltage (AC Voltage Range) [V]			220 / 230 / 240 (180 - 270)		
Rated Grid Frequency [Hz]			50 / 60, ±5		
<b>EPS OUTPUT (WITH BATTERY)</b>					
Max. EPS Power [VA]	7000	8000	9000	10000	10500
EPS Rated Voltage [V], Frequency [Hz]			220 / 230 / 240 (50 / 60)		
Max. EPS Current [A]	31.8	36.4	40.9	45.5	47.7
EPS Peak Power [W]	10000, 60s			12000, 60s	
Switch Time [ms]			<20		
Total Harmonic Distortion (THDv, Linear Load) [%]			<2		
Parallel Operation			Max. 10 Stacks		
<b>EFFICIENCY</b>					
MPPT Efficiency [%]			99.90		
Euro-Efficiency [%]			97.40		
Max. Efficiency [%]			97.80		
Max. Battery Charge Efficiency (PV to BAT) (@Full Load) [%]			98.50		
Max. Battery Charge / Discharge Efficiency (BAT to AC) (@Full Load) [%]			97.00		
<b>PROTECTION</b>					
PV Reverse Polarity Protection			YES		
Batter Reverse Protection			YES		
Anti-islanding Protection			YES		
Output Short Protection			YES		
Leakage Current Protection			YES		
Insulation Resistor Detection			YES		
Over-current Protection / Over-temperature Protection			YES		
Over Voltage Category			III (AC side), II (DC side)		
AC/DC Surge Protection			Type II / Type II		
AFCI Protection			Optional		
<b>POWER CONSUMPTION</b>					
Standby Consumption [W] (Idle)			<15		
<b>STANDARD</b>					
Safety			IEC62109-1 / IEC62109-2 / IEC 62477-1		
EMC			EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3		
Certification			G99 /4777.2 / EN50549-1 / CEI 0-21 / NRS 097-2-1		
<b>PROTECTION</b>					
Ingress Protection			IP65		
Protective Cls			ClS I		
Operating Temperature Range [°C]			-25°C ~ +60°C (De-rating at +45°C)		
Humidity [%]			0 ~ 95 (Non-condensing)		
Altitude [m]			<2000		
Storage Temperature [°C]			-40°C ~ +70°C		
Noise Emission (Typical) [dB]			<30		
<b>GENERAL DATA</b>					
Dimensions (W * H * D) [mm]			450*527*208		
Weight [kg]			29		
Cooling Concept			Natural		
Topology			Non-isolated		
Communication			Meter (Optional), WIFI, 4G (Optional), DRM, USB, CT, RS485		
LCD Display			Backlight 16*4 Character		
Warranty			10 Years		
Country of Manufacturer			China		

<sup>(1)</sup> The maximum generating power of each PV string is limited to 3300 watts.